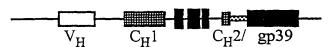
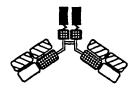


Construct B (F(ab')<sub>2</sub>; mAb variable chain sequences not shown).



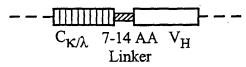


Construct C (Fab; mAb variable chain sequences not shown).





Construct D (Fab w/ $C_{K/\lambda}/V_H$  linked; mAb heavy chain constant domain, mAb light chain variable domain and gp39 sequences not shown).





Construct E (Fv).

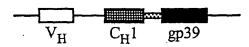


Fig. 1

Proposed TAA-specific mAb/gp39 immunotherapeutic fusion proteins

TAA specific mAb, F(ab')2, F(ab) or sFv genetically fused to human gp39 Tumor cell CD40+ leukocyte Tumor gp39 cell Tumor gp39 DC cell IL-12 production, CTL B7.1 expression, Th cell Anti-tumor APC functions, Th1/CTL stimulation, Enhanced tumor specific systemic immune response

Fig. 2

Anti-tumor immune response induction by a TAA specific mAb-gp39 chimeric protein